

JP 59-044,308

Code: 5000-77761

JAPANESE PATENT OFFICE  
PATENT JOURNAL (A)  
KOKAI PATENT APPLICATION NO. SHO 59[1984]-44308

Int. Cl. <sup>3</sup> :	A 61 K 7/46 A 61 L 9/01
Sequence Nos. for Office Use:	6675-4C 6917-4C
Filing No.:	Sho 57[1982]-154852
Filing Date:	September 6, 1982
Publication Date:	March 12, 1984
No. of Inventions:	1 (Total of 2 pages)
Examination Request:	Not filed

AROMATIC SUBSTANCE

Inventor:	Akira Masuda, c/o Masuda Denki K.K., 1419 Takada, Kashiwa-shi
Applicant:	Masuda Denki K.K., 1419 Takada, Kashiwa-shi
Agent:	Masahisa Takahashi, patent attorney

[There are no amendments to this patent.]

Claims

1. An aromatic substance, characterized by impregnating a porous substance powder with an antioxidant-containing perfume, subsequently kneading the impregnated substance with wax and cooling to solidify the kneaded mixture.
2. The aromatic substance of Claim 1, wherein the compounding proportion of the impregnated substance to the wax is set in the range of 1 to 3 parts to 3 to 1 part.

### Detailed explanation of the invention

This invention pertains to an aromatic substance with the endurance of aroma improved.

As a perfume, there are oil-type perfumes (natural perfumes), hydrocarbon-type perfumes, alcohol-type perfumes (synthetic perfumes), etc., but they are all volatile, and the endurance of their effects is poor.

Therefore, the endurance power is improved by impregnating gelatin, wax, etc. with perfumes and kneading the mixture, but it is difficult to extend the endurance to 1-2 months, and at the same time, the stability of the aromaticity is poor.

Considering the shortcomings of the prior art as described above, the objective of this invention is to make the endurance of the effects long and attempt stabilization of aromaticity, and produce an aromatic substance prepared by impregnating a porous substance powder with an antioxidant-containing perfume, subsequently kneading the impregnated substance with wax and cooling to solidify the kneaded mixture.

The antioxidant in this case is preferably a compound having no color, no smell and resistance against ultraviolet rays, and, for example, it is possible to use a phthalic acid-type substance. The amount of such an antioxidant to be used is about 1 part per 10 parts perfume.

As a porous substance, active carbon, diatomaceous earth, silica gel, etc. can be cited, and the amount of perfume used for impregnation is determined according to the liquid-holding capacity of the porous substance. For example, in the case of diatomaceous earth, 1 part diatomaceous earth may be impregnated with 1-4 parts perfume.

The melting point of the wax is preferably sufficiently high so that it does not melt while using the substance, and for example, the melting point is preferably in the range of 80-100°C. The higher the perfume content, the lower the solidification ability of the wax, and the higher the wax content, the lower the rate of perfume dispersion because of reduced capillary action. Therefore, the mixing proportion of the impregnated substance to the wax is limited in the range of 1 to 3 parts to 3 to 1 part.

The aromaticity of this invention can be stabilized and made to endure for a long time because the impregnated substance itself has water retaining property; at the same time, by kneading the impregnated substance with wax, the substance impregnated with perfume is uniformly scattered inside wax, and the perfume is gradually released on the wax surface because of the permeability of the wax and capillary action, providing the aroma continuously.

This invention is explained in detail by using application examples as follows.

Sample (1) was prepared by impregnating diatomaceous earth with a 10% phthalic acid-type antioxidant-containing so-called C<sub>16</sub> aldehyde-type strawberry-scented perfume in a proportion of 1:1, kneading the impregnated substance with molten wax in a mixing proportion of 1:1 and cooling the mixture for solidification.

Sample 2 was prepared by using the same procedures as those used for the sample (1), except that the mixing ratio of the strawberry-scented perfume to diatomaceous earth was changed to 3:1.

Sample 3 was prepared by kneading an impregnated substance, obtained from strawberry-scented perfume and diatomaceous earth in a proportion of 1:1, with molten wax in a mixing proportion of 3:1 and cooling the mixture for solidification.

Sample 4 was prepared by impregnating diatomaceous earth with a 10% phthalic acid-type antioxidant-containing apple-scented perfume comprising mostly amyl valerate in a proportion of 3:1, kneading the impregnated substance with molten wax in a mixing proportion of 1:3 and cooling the mixture for solidification.

The endurance of aromaticity was evaluated for those samples. The results obtained are summarized in the following table.

Table. Results on evaluation of aromaticity endurance in samples

① 試料名	② 香料 珪藻土	③ 含浸物 ワックス	④ 芳香の持続性			
			⑤日	⑥1ヵ月	⑦3ヵ月	⑧6ヵ月
試料 (1) ストロベリー系	⑦ 1/1	1/1 ⑨	芳香有 (中)	(中)	(中)	(弱) ⑪
試料 (2) ストロベリー系	⑦ 3/1	1/1 ⑩	芳香有 (強)	(中)	(中)	(中) ⑨
試料 (3) ストロベリー系	⑦ 1/1	3/1 ⑩	芳香有 (強)	(強)	(中)	(中) ⑩
試料 (4) アップル系	⑧ 3/1	1/3 ⑨	芳香有 (中)	(中)	(中)	(中)

- Key:
- 1 Sample name
  - 2 Perfume/diatomaceous earth
  - 3 Impregnated substance/wax
  - 4 Aromaticity endurance
  - 5 Days
  - 6 Months
  - 7 Sample
  - 8 Strawberry-scented
  - 9 Sample
  - 10 Apple-scented
  - 9 Aromatic (moderate)
  - 10 Aromatic (strong)
  - 11 Aromatic (weak)

(Note) The aromaticity measurement was carried out by placing 5-cm-square samples in separate rooms, the presence of aroma was evaluated, and the results were graded as strong, moderate or weak.

As apparent from the results of the above measurements, the aromaticity was found to be continuously detected for more than 6 months for respective samples, and the deterioration of the aroma was found to be little.

Furthermore, the capillary action was found to be enhanced and the aromaticity power was found to be increased by increasing the amount of the impregnated substance in the wax. Furthermore, in the case of a perfume having a strong aroma such as apple-scented perfume used in the above example, the amount of the impregnated substance mixed with the wax may be reduced, reducing the capillary action to achieve stabilization and long-term endurance of the aroma.

In addition, an antioxidant is added to the perfumes used in the above application examples, so that the risk of the perfume itself being denatured is eliminated even in the case of kneading in molten wax at a temperature of around 100°C; also, there is no risk of denaturization by ultraviolet rays, etc., in the case of applications inside cars with exposure to strong sunlight, and consequently, it can withstand long-term applications.

As apparent from the above description, this invention enables the endurance of aromaticity to be extended beyond 6 months, and at the same time, the stabilization and uniformity of aromaticity can be achieved, providing an extremely useful aromatic substance for indoor and car interior applications.